APPENDIX A
REGULATORY BACKGROUND

General

Unlike most regulatory areas, the environmental arena does not rely on a single law, but rather a series of topic-focused legislation (i.e. Clean Air, Clean Water, Toxic Substances, etc.). The result is a complex and often seemingly contradictory system that can make compliance difficult and frustrating.

Complicating this is the creation of the process of "state authorization" in which the Environmental Protection Agency (EPA) authorizes a state to manage a specific environmental program or programs within its borders if the state has its own laws and regulations which are "essentially equivalent" to the Federal program. For some programs, local governments are allowed to modify the state program even further. The result is an environmental program that can change dramatically with a change in geography.

Also, unlike other regulatory areas, environmental laws not only prohibit certain activities after their effective date, in some cases, they create legal liability for actions occurring decades before the legislation was created. The Comprehensive Environmental Response Compensation and Liability Act (CERCLA) or Superfund, for example, can hold organizations and/or individuals liable for improper waste management any time prior to its passage in 1980.

Environmental Laws

To understand the scope of the environmental program within the United States and its territories, it is necessary to understand the various environmental statutes and the specific areas they regulate. The following is a chronological listing and a very brief summary of each pertinent law.

FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT

The ***Federal Insecticide, Fungicide and Rodenticide Act*** (FIFRA) was enacted in 1947. The statute was originally administered by the Department of Agriculture who monitored the efficacy claims of manufacturers through a registration program. In 1970, FIFRA authority was transferred to EPA. The Act was amended in 1972 by the ***Federal Environmental Pesticide Control Act*** (FEPCA). This amendment strengthened enforcement, shifted emphasis from labeling and efficacy to health and the environment, provided greater flexibility for controlling dangerous chemicals, covered interstate registrations and specific uses, and streamlined the administrative appeals process. Congress enacted subsequent amendments in 1975, 1978, and 1988. For more information, the statute is found in 7 U.S.C. §136 et seq. The regulations addressing FIFRA are found in 40 CFR 152-186.

IMPACTS ON NOAA

FIFRA focuses its enforcement efforts on the manufacture, registration, distribution, and management of the commercial application of pesticides. While NOAA personnel rarely use "restricted use" pesticides, the agency routinely contracts for pesticide application services and is ultimately responsible for the use of any pesticides on NOAA properties. In addition, NOAA facilities may handle, store, and dispose of these pesticides. NOAA facilities are required to comply with FIFRA if they:

- Apply or contract for the application of registered or restricted pesticides on-site;
- Store registered or restricted pesticides on-site; and/or
- Dispose of registered or restricted pesticides.

RESPONSIBILITIES UNDER FIFRA

NOAA is responsible for ensuring that pesticide management activities under FIFRA are successfully performed. These responsibilities include:

- Ensuring that NOAA applicators are properly trained, certified, and use appropriate personal protective equipment.
- Properly managing storage facilities.
- Disposing of pesticide residues and waste in accordance with recommended procedures.
- Maintaining records of pesticide applications
- Ensuring contractors are required by contract to comply with all applicable Federal, State and local laws and regulations.

Section 10 of this manual describes the NOAA compliance activities under the FIFRA.

NATIONAL ENVIRONMENTAL POLICY ACT

The ***National Environmental Policy Act*** (NEPA) of 1969 established national environmental policy and goals for the protection, maintenance, and enhancement of the environment. NEPA requires all federal agencies to evaluate the historic, socioeconomic, and environmental consequences of "major actions" and to follow a procedural decision making process that includes public input when addressing environmental impacts. NEPA also established the President's Council on Environmental Quality (CEQ), which reviews Federal government activities. For more information, the statute can be found in 42 U.S.C. §4321 et seq. and applicable regulations are in 40 CFR 1500-1517.

IMPACTS ON NOAA

NEPA requires all Federal agencies to use a systematic, interdisciplinary process to provide environmental impact information to federal, state, local, Indian tribal officials, and citizens before decisions are made to take major actions that may significantly affect the environment.

As a result, NOAA has promulgated NAO 216-6 "Environmental Review Procedures for the Implementation of the National Environmental Policy Act." This administrative order explains that NOAA is subject to NEPA if it:

- engages in a major federal action, including construction, modification, or rehabilitation of a building or property;
- implements changes in facility siting or significant redistribution of NWS staff;
- changes activities that alter prevailing land use; and/or
- provides grant money.

RESPONSIBILITIES UNDER NEPA

NEPA is largely a procedural statute which requires Federal agencies to study, develop, and describe impacts, alternatives, and mitigation measures, and to obtain public input on projects considered to be major federal actions. NEPA should be part of the planning process of all major NOAA actions. The types of activities required under NEPA include:

- Evaluating all federal actions to determine the applicability of NEPA --- as appropriate submitting Categorical Exclusion (CE) or Findings of No Significant Impact (FONSI) documentation to denote where actions are not significant.
- Performing Environmental Assessments (EAs) and preparing Environmental Impact Statements (EISs).
- Developing and submitting a Record of Decision (ROD) to address the EIS findings and provide project alternatives and mitigation measures.
- Submitting plans to state or local agencies.
- Ensuring public participation in the NEPA process.

Section 14 of this manual describes the NOAA compliance activities under the NEPA.

Because the NEPA process can appear daunting at least initially, the NOAA RECO should be contacted for assistance.

CLEAN AIR ACT AND **THE CLEAN AIR ACT AMENDMENTS**

The ***Clean Air Act*** was enacted in 1970 and expanded in 1990 by the ***Clean Air Act Amendments*** (CAAA). The 1990 statute regulates air pollution under six distinct titles: Title I - Air Pollution Prevention and Control; Title II - Emission Standard for Mobile Sources; Title III - Air Toxics; Title IV - Acid Deposition Control; Title V - Permits; and Title VI - Stratospheric Ozone Protection. Section 107 and 110 of the CAAA give the states primary authority for maintaining air quality within their borders at a level consistent with the National Ambient Air Quality Standard (NAAQS). States are required to develop State Implementation Plans (SIPs) to establish specific regional requirements and emission standards. In addition, Executive Order 12843 contains "Procurement Requirements and Policies for Federal Agencies for Ozone-

Depleting Substances." For more information, the statute can be found in 42 U.S.C. §7401 et seq. Regulations addressing air requirements are in 40 CFR 50-93 as well as 29 CFR 1910.119.

IMPACTS ON NOAA

Most of NOAA's compliance requirements will be associated with CFC and halon management, as well as state regulation of boilers, emergency generators, and fuel storage tanks. NOAA facilities with large boilers may exceed emissions thresholds and may be required to obtain permits. NOAA facilities are required to comply with provisions of the CAAA if they:

- Modify, construct, or add new boilers, generators, or fuel storage tanks for steam generating units with heat inputs exceeding 10 million BTU;
- Manage the removal and demolition of asbestos-containing material (ACM);
- Emit 10 tons or more per year of any hazardous air pollutant (HAP); and/or
- Service or repair CFC-containing equipment or dispose of CFCs.

RESPONSIBILITIES UNDER THE CAAA

NOAA is responsible for ensuring that management activities under the CAAA and state delegated programs are successfully completed. These responsibilities range from training employees and obtaining and complying with the terms of permits to management of facility construction/modifications. Specific activities required by the CAAA include:

- Obtaining necessary permits and maintaining emissions within permitted levels.
- Complying with State Implementation Plan (SIP) requirements.
- Ensuring that all CFC technicians attend EPA-certified training courses.
- Ensuring that all CFC recovery/recycling equipment is certified to EPA standards and venting prohibitions are maintained.
- Managing facilities with ACM and conducting ACM removals in conformance with the air toxics program requirements.
- Developing risk management plans where required.
- Maintaining all required records/documentation.
- Returning or disposing of all products containing ozone-depleting compounds.
- Purchasing of alternative fueled vehicles.

Section 8 of this manual describes the NOAA compliance activities under the CAAA.

CLEAN WATER ACT

The ***Clean Water Act*** (CWA) regulates the protection of the nation's waterways and wetlands. It

was enacted in 1972, replacing the ***Federal Water Pollution Control Act***, and was amended in 1977 and 1987. Title III of the Act established pretreatment standards for discharges to treatment facilities. Title IV of the Act established the National Pollutant Discharge Elimination System (NPDES), which provided for the permitting of point-source discharges. Section 404 established a permit program for dredge and fill operations. Storm water and non-point source discharges are also regulated under the Act. EPA, along with other federal, state, and local agencies, administer the various programs established under the CWA. For more information, the statute can be found at 33 U.S.C. §1251 et seq. Regulations addressing clean water are located in 40 CFR 122.

IMPACTS ON NOAA

Most NOAA operations involve the collection and discharge of water to either a direct outfall or to a local sewage treatment facility. Additionally, NOAA installations may be sited in the vicinity of waterways or wetlands. These facilities may be subject to CWA requirements.

NOAA facilities are required to comply with CWA provisions if they:

- Discharge pollutants, heat, or storm water from a point-source into the waters of the United States;
- Discharge pollutants from a point source to a publicly-owned treatment works (POTW);
- Dispose of or place fill materials into the waters of the United States, includes construction activity in the vicinity of waterways or wetlands;
- Spill or discharge harmful quantities of oil or hazardous substances into navigable waters or adjoining shorelines;
- Apply herbicides to river gauges or other instruments while in or near wetlands;
- Manage in excess of a total of 1,320-gallons of fuel and other petroleum products in aboveground storage tanks or containers larger than 55-gallons; and/or
- Manage greater than 42,000 gallons of petroleum products in underground storage tanks.

Navigable waters is defined as a body of water that may be put into public use whether it be for commercial navigation or not. It makes no difference if the water body is a shallow pool, or muddy lake, or marsh. The water body need have the potential to be used in agriculture, trade, or commerce and possess the capacity for floatage in transporting products (i.e., logs or wood) to market.

RESPONSIBILITIES UNDER THE CWA

NOAA is responsible for ensuring that its activities do not negatively impact area water bodies or wetlands. Depending on the point of discharge, effluents from NOAA facilities must meet either pretreatment standards or NPDES requirements. Additionally, NOAA facilities must have a plan in place that assesses preventing, reporting and responding to spills. Specific management activities required by the CWA include:

- Developing and maintaining a Spill Prevention Control and Countermeasure (SPCC) or Best Management Practices (BMP) plan for storage of petroleum products in a tank.
- Ensuring employees have required training.
- Managing discharges to a POTW in accordance with established federal, state, and local pretreatment standards as well as any guidelines imposed by the NOAA RECO (i.e. "RECO rules").
- Maintaining storm water permits at "industrial category" sites.
- Notifying the National Response Center of harmful spills of hazardous substance to navigable waters or adjoining shorelines.
- Obtaining an NPDES permit and managing direct discharges in compliance with permit conditions.
- Properly maintaining and operating water treatment systems.
- Monitoring, recording, and reporting pollutant effluent concentrations.
- Applying for Section 404 dredge and fill permits for construction and development projects.

Sections 1 and 7 of this manual address the NOAA compliance activities under the CWA.

SAFE DRINKING WATER ACT

The *Safe Drinking Water Act* (SDWA) was passed in 1974 to protect the quality of the drinking water in the U.S. The law regulates all waters actually or potentially designed for use as drinking water whether aboveground or in underground aquifers.

The law authorized the EPA to create standards for safe drinking water and required the owners or operators of ublic water systems to comply with the health-related standards referred to as the primary standards. Currently there are over 80 contaminants which are monitored by the primary drinking water standards. As the States became authorized by the EPA to manage the drinking water program, they encouraged the attainment of a set of nuisance-related standards called the secondary standards.

IMPACTS ON NOAA

Because most NOAA facilities receive their drinking water from public water systems, they only need to ensure the system does not become contaminated due to improper plumbing or a missing or faulty back flow preventor valve.

NOAA facilities that operate their own well may be fully regulated as a public water system if the well serves 25 or more people.

In this case, the drinking water well would be required to meet the primary and secondary standards.

Section 5 of this manual addresses the NOAA compliance activities under the SDWA.

TOXIC SUBSTANCES CONTROL ACT

The ***Toxic Substances Control Act*** (TSCA) was enacted in 1976 to provide for testing of potentially hazardous chemicals and, where necessary, to authorize EPA regulation of such substances. The Act requires testing and restricting the manufacture, distribution, and use, of toxic substances. It also is used to regulate the disposal of certain hazardous materials such as asbestos, polychlorinated biphenyls (PCBs), radon, and lead. Several states have their own, more stringent programs similar to TSCA, but only the federal asbestos standards and lead abatement standards can be delegated to the states. For more information, the Act can be found in 42 U.S.C. §2601 et seq. The regulations are codified in 40 CFR Parts 700 to 766, with Part 761 detailing management requirement for PCBs.

IMPACTS ON NOAA

NOAA facilities and operations typically involve management of materials regulated under TSCA. Older electric equipment, such as switches, transformers, and capacitors typically contain PCBs and pre-1987 structures were often built using asbestos materials. Specific activities required by TSCA include:

- Properly maintaining or disposing of equipment containing PCBs;
- Performing asbestos surveys, abatement, or operation and maintenance activities;
- Performing or overseeing lead-based paint abatement activities; and/or
- Properly managing a location with potentially significant radon levels

RESPONSIBILITIES UNDER TSCA

Under TSCA, NOAA is responsible for ensuring compliance with the management and reporting requirements as well as conducting abatement activities in conformance with TSCA standards. Specific TSCA requirements include:

- Marking, labeling, storage, packaging, and disposal of PCBs and PCB-containing equipment.
- Preparing and submitting annual reports for facilities managing over 40 pounds of PCBs.
- Preparing and maintaining PCB disposal manifests, certificates of destruction, and exception reports.
- Implementing a Model Accreditation Plan (MAP) by setting minimum training standards for personnel engaged in asbestos abatement activities.
- Conducting lead and lead-based paint abatement projects in conformance with established standards.
- Measuring radon levels within buildings and mitigating unsafe exposure.
- Maintaining records.

Sections 2, 11, 12 and 13 of this manual describe the NOAA compliance activities under TSCA.

RESOURCE CONSERVATION AND RECOVERY ACT SUBTITLE C

Subtitle C of the ***Resource Conservation and Recovery Act*** (RCRA) was enacted in 1976, replacing the ***Solid Waste Disposal Act*** and the ***Resource Recovery Act***. RCRA has been amended by the ***Hazardous and Solid Waste Amendments*** (HSWA) and the ***Federal Facilities Compliance Act*** (FFCA). RCRA regulates the generation, transportation, treatment, and disposal of solid and hazardous waste. The FFCA was specifically enacted to eliminate the federal exclusion from liability and to provide for hazardous waste management and enforcement provisions for federal facilities that are the same as the private sector. In many cases, some or all of the authority under RCRA has been delegated to qualified states. The statute can be found in 42 U.S.C. §6901 et seq. with the regulations addressing hazardous waste in 40 CFR 260. Many states have their own hazardous waste requirements that exceed federal standards.

IMPACTS ON NOAA

Because RCRA Subtitle C regulates hazardous waste from "cradle to grave," most NOAA operations and facilities are affected by the statute. NOAA facilities are subject to the provisions of RCRA Subtitle C if they:

- Generate hazardous waste --- many NOAA facilities qualify as "small quantity generators" under RCRA;
- Accumulate or store hazardous waste --- generators need to properly manage satellite (e.g., temporary) and central storage units;
- Transport hazardous waste off-site for treatment and/or disposal; and
- Generate universal waste.

RESPONSIBILITIES UNDER RCRA

Under RCRA, NOAA is responsible for ensuring the proper management and disposal of all hazardous waste generated as part of its operations.

Under this law, NOAA facilities are required to:

- determine if they generate any hazardous waste
- determine the appropriate category of generator depending on the volume of waste generated
- comply with all appropriate generator standards
- manage all generated waste in accord with the appropriate State and/or Federal requirements.

Section 2 of this manual describes the NOAA compliance activities under RCRA.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT

The ***Comprehensive Environmental Response, Compensation and Liability Act*** (CERCLA) was enacted in 1980 to provide EPA authority to respond to hazardous substance releases or threatened releases that could endanger public health or welfare or the environment. The

legislation, known as Superfund, is based on the premise that those responsible for hazardous substances at a site should bear the burden of the cleanup. CERCLA was amended by the ***Superfund Amendments and Reauthorization Act*** (SARA) in 1986 and the ***Community Environmental Response Facilitation Act*** (CERFA) in 1992, strengthening enforcement provisions and facilitating settlement negotiations to encourage or compel responsible party (RP) cleanups. CERCLA, as amended by SARA and CERFA, requires community involvement during cleanup, reporting of spills, and performance of environmental due diligence audits (EDDA) for Federal property disposal. Many states have enacted counterparts to CERCLA. For more information, the statute can be found in 42 U.S.C. §9601 to 9675. Regulations addressing environmental cleanup and response are in 40 CFR 300, 302, 310, 355, 373.

IMPACTS ON NOAA

Because CERCLA regulates hazardous substance releases and environmental cleanup of past activities, some NOAA operations, facilities, and programs are affected by the statute. Section 120 of CERCLA specifically addresses the responsibilities of Federal facilities. EPA can hold NOAA, as the property owner and the party responsible for hazardous substance management, liable for monetary payments (e.g., site assessment costs) or compel cleanup immediately or in the future. Additionally, SARA and CERCLA impose reporting and community involvement requirements to ensure disclosure and cleanup of hazards. NOAA facilities are required to comply with provisions of CERCLA if they:

- Purchase or transfer real property;
- Own or operate a facility that is on or is being considered for the National Priorities List (NPL);
- Manage appreciable quantities of hazardous substances on-site; and/or,
- Cause a hazardous substance release in excess of the reportable quantity.

RESPONSIBILITIES UNDER CERCLA

NOAA responsibilities under CERCLA involve two separate but related areas:

- releases to the environment of hazardous substances in the past, and
- releases of hazardous substances now.

The requirements for releases of previous hazardous substances via improper disposal and/or unreported leaks/spills or other releases require the NOAA to report all such events as part of a "due diligence audit" required upon property transfers.

If a cleanup is required, NOAA facilities must:

- cooperate during the cleanup effort
- conduct a public relations program to ensure community awareness
- comply with interagency agreements and State requirements

- comply with HAZWOPER
- maintain security

For present activities, NOAA facilities must report all releases into the environment of an EPA-defined hazardous substance equal to the reportable quantity established under 40 CFR 302.4.

Section 15 of this manual describes the NOAA compliance effort under CERCLA.

UNDERGROUND STORAGE TANKS, RCRA SUBTITLE I

In 1984, Congress enacted the ***Hazardous and Solid Waste Amendments*** (HSWA), adding Subtitle I to the Resource Conservation and Recovery Act (RCRA). Subtitle I was enacted to address the 500,000 underground storage tanks (USTs) in the country then estimated to be leaking. The statute requires EPA to establish standards for tanks installed both prior to and after passage of the new requirements. Such standards cover UST design, operation, cleanup, administration, and closure. The statute can be found in 42 U.S.C. §699 et seq. Federal UST regulations are in 40 CFR 280. The authority to administer the UST program has been delegated to the states. Many have issued their own UST standards which in some cases exceed the federal minimum and contain more stringent requirements and penalties.

IMPACTS ON NOAA

All USTs operated by NOAA should have been removed under the provisions of HSWA and thus no NOAA facility is subject to Subtitle I unless it:

- Still operates or maintains an UST containing petroleum (including diesel fuel, gasoline, and used oils, but not heating oil or propane) or a hazardous substance;
- Maintains an UST that was in place on May 8, 1986 and contained regulated substances any time since January 1, 1974 (notification required);
- Receives state or EPA direction to close and perform an assessment of the area near an UST that was closed prior to the effective date December 22, 1988;
- Maintains an above ground storage tank (AST) with 10 percent or more of the tank volume underground (including the pipe distribution network); or
- Acquires real estate that contains an UST installed and operated by the previous owner.

RESPONSIBILITIES UNDER HSWA

Under HSWA, NOAA facilities must ensure all existing underground storage tanks are registered with the State, upgraded to meet the new standards and have a functioning release detection system. If these tanks ever leak, the spill must be properly addressed and appropriate corrective action performed.

Should an underground tank no longer be needed, it must be properly closed in accordance with State and/or Federal requirements.

The NOAA facility must also maintain all records required under these regulations.

Section 1 of this manual includes a description of the NOAA compliance effort with regard to HSWA.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

The ***Emergency Planning and Community Right-To-Know Act*** (EPCRA), Title III of the ***Superfund Amendments and Reauthorization Act*** (SARA), was enacted in 1986. The statute contains four major components: Emergency Planning §301-303, Emergency Release Notification §304, Community Right-To-Know §§311-312, and Toxic Release Inventory §313. EPCRA requires facilities to submit information to state and local communities to enable the development of local chemical emergency preparedness programs. The original statute exempted federal facilities from complying with Title III since they did not fall under the definition of a "person." However, Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention requirements, issued on August 6, 1993, requires Federal facilities meeting the EPRA definition of "facility" to comply with all provisions of EPCRA. For more information, the statute is located in 42 U.S.C. §11001 et seq. and the regulations are in 40 CFR 355 through 374.

IMPACTS ON NOAA

NOAA is responsible for ensuring that management activities under EPCRA and state delegated programs are successfully completed. These responsibilities range from assisting the Local Emergency Planning Committee (LEPC), designating emergency response coordinators and notifying authorities of releases to submitting Material Safety Data Sheets (MSDSs) and Tier I/Tier II forms. Specific management activities are required by EPCRA if a NOAA facility:

- Has an emergency power backup system containing lead-acid or gel-cell batteries with about 90-gallons of electrolyte,
- Has a fuel storage tank containing at least 1,370-gallons (or 10,000 pounds) of diesel fuel, heating oil or gasoline,
- Has a fuel storage tank containing at least 2,532-gallons (or 10,000 pounds) of propane, and/or
- Stores 100-pounds of chlorine.

RESPONSIBILITIES UNDER EPCRA

If a NOAA facility stores an OSHA hazardous chemical or an EPA-identified extremely hazardous chemical in a quantity that exceeds the threshold planning quantity, the facility must:

- notify the State Emergency Response Commission (SERC),
- designate a representative to the Local Emergency Planning Committee (LEPC),
- notify the SERC and LEPC of all releases of a hazardous chemical or extremely hazardous

substance that exceeds the reportable quantity,
- file the annual Tier II reports,
- submit MSDSs to the Fire Department.

These requirements are discussed in Section 4 of this manual.

POLLUTION PREVENTION ACT

The Pollution Prevention Act of 1990 (PPA) created a national hierarchical policy for the management of wastes. Simply stated, for each waste, the law requires all generators of the waste to consider:

- waste prevention or reduction methods first, then,
- recycling in an environmentally sound manner, and finally, if no other option can be applied,
- disposal.

The law created the Office of Pollution Prevention within the Environmental Protection Agency to develop and implement a national source reduction strategy.

The law is the base for Executive Order 12856 which directs all Federal Agencies to develop pollution prevention strategies and incorporate them into facility management. A series of other Executive Orders (see E.O. 12843, 12844, 12845, 12873 and 12902) encourage the Federal government to take the lead in pollution prevention and environmental stewardship.

IMPACTS ON NOAA

In performing its mission, NOAA utilizes materials, energy and natural resources in addition to generating waste.

The PPA and the Executive Orders it spawned requires NOAA personnel to:

- revise product specifications and procurement procedures to foster use of more environmental-friendly products,
- set specific goals for waste prevention,
- set specific goals for recycling efforts,
- create steering committees to direct these efforts, and,
- purchase printing paper with a 30% recycled content.

RESPONSIBILITIES UNDER PPA

To comply with the requirements of the PPA, NOAA facilities must review their procurement procedures.

If possible, the facility should establish an authorized use list, comply with the Comprehensive

Procurement Guidelines and restrict the use of credit cards to ensure the goals of the law are met.

Sections 6 and 9 of this manual describe the NOAA compliance efforts under PPA.

Other Laws

There are two additional laws that have important impacts in most NOAA environmental programs, the Hazardous Materials Transportation Act and the Occupational Safety and Health Act.

HAZARDOUS MATERIALS TRANSPORTATION ACT

The Hazardous Materials Transportation Act (HMTA) was passed in 1974. Because the EPA requires the DOT rules be followed when transporting hazardous materials and waste, the Hazardous Materials Transportation Act has become an integral part of all environmental programs. The purpose of the law is to protect the nation against risks to life and property which are inherent in the transportation of hazardous materials in commerce. The Department of Transportation (DOT) was given the responsibility for issuing the HMTA regulations (49 CFR 171-177). These regulations govern the packaging, marking, labeling and acceptable condition of hazardous materials offered for intrastate or interstate transportation. The law covers the transportation procedures and specifications for motor vehicle, aircraft, railcar and vessels carrying hazardous materials.

The **1990 Hazardous Materials Transportation Uniform Safety Act** amended the HMTA by addressing the following specific areas:

- Highway Routing - each state and Indian tribe may establish and enforce specific highway routes for hazardous materials according to the limitations and requirements established under this law.

- Shipping Papers - the person offering a hazardous material for transportation must provide a shipping paper with information for emergency incidents.
- Training Requirements - training is required for "HAZMAT employees", that is, individuals who affect transportation of hazardous materials including employees who handle, prepare or package hazardous materials or operate a vehicle to transport hazardous materials. These requirements are in addition to the HAZWOPER training requirements under OSHA and EPA.

- Civil and criminal penalties were revised to broaden the scope and assessment of fines for violations.

IMPACTS ON NOAA

Unfortunately, the HMTA has spotty application to NOAA activities. For example,

transportation of paint thinner from a NOAA office to a remote work site is not regulated by the DOT but transportation of the spent paint thinner from the NOAA office to a hazardous waste disposal site is regulated. Even if NOAA personnel fully understand which activities are regulated, prudence may require compliance with the DOT rules for all situations.

RESPONSIBILITIES UNDER HMTUSA

NOAA is responsible for ensuring all DOT-regulated hazardous materials are properly managed. These responsibilities include:

- Ensuring every package is properly labeled and marked,
- Accurately describing the material on shipping papers and manifests,
- Ensuring shipping vehicles have the appropriate placards, and
- Providing DOT hazardous material transport training to appropriate personnel.

Section 3 of this manual describes the NOAA compliance activities under the HMTUSA.

OCCUPATIONAL SAFETY AND HEALTH ACT

The Occupational Safety and Health Act (OSHA) was signed by President Richard Nixon on December 31, 1970. Initially the act was aimed at the private sector however, a series of Executive Orders significantly modified its application. Although OSHA is not an "environmental" law, it has served as the basis for a series of programs to protect workers who are exposed to hazardous chemicals as part of their job as well as those who respond to spills and other emergencies.

Presidential Executive Order 11612 signed on July 26, 1971 stated that the Federal government, as the nation's largest employer, has a special obligation to set an example for safe and healthful employment. As a result, each Federal department and agency was directed to establish an occupational safety and health program in compliance with Section 19 of the act. Section 19 required this program to be "consistent with the standards promulgated under Section 6".

Executive Order 11807 issued in 1974 more clearly defined the scope, requirements and responsibilities of the Federal agency programs and required the Secretary of Labor to issue "guidelines".

Executive Order 12196 signed on February 26, 1980 **required each agency head to comply with all standards** issued under Section 6 of the Act, except where the Secretary of Labor approves compliance with alternative standards.

IMPACTS ON NOAA

To meet these Executive Orders, the director of NOAA has endorsed and implemented a safety and health program which includes:

- Compliance with applicable standards,
- At least annual inspections of all work places by qualified OSH inspectors,
- Prompt abatement of identified hazards
- Procedures for all employees to report suspected hazards to their supervisors and/or safety and health officials without fear of reprisal.
- Creation of an active Hazard Communication Standard Program for all employees working with hazardous chemicals.
- Ensuring all affected employees are trained to properly respond in an emergency involving a hazardous material.
- Appropriate OSH training for safety and health officials, all supervisory personnel and employees.
- Procedures for the review, in advance of procurement or construction, of facility, system and subsystem design to ensure that OSH hazards are eliminated or controlled throughout the life cycle.
- A thorough accident investigation process and comprehensive OSH management information system.

RESPONSIBILITIES UNDER OSHA

NOAA is responsible for evaluating workplace hazards and mitigating the risks to its employees. This requires the creation and implementation of a wide variety of programs which include:

- illness and injury reporting
- assessing the need for and providing the necessary personal protective equipment
- development of procedures for various types of emergencies
- ensuring prompt exit from all work areas in an emergency
- providing a "safe" workplace by implementing programs for lockout/tagout; machine guards, hand and power tool use; welding, cutting and brazing; and electrical safety.

For employees who work with hazardous substances, NOAA must provide:

- a worker right-to-know program
- effective spill response
- confined space permit program
- control of specific toxic substances (asbestos, lead, benzene, etc.)
- safe work practices for handling compressed gases, flammable and combustible materials and radioactive sources.

Section 17 of this manual describes the NOAA compliance activities with the Hazard Communication Standard (HAZCOM) while the NOAA Health and Safety Manual describes all other OSHA compliance efforts.